

5906

R-014-1002.1

**ADDENDUM B TO THE RI/FS COMMUNITY RELATIONS PLAN FOR  
REMOVAL ACTION NO. 5 K-65 DECANT SUMP TANK AUGUST  
1991**

08/01/91

DOE-FN      EPA  
5  
ADDENDUM

**ADDENDUM B**  
**TO THE**  
**RI/FS COMMUNITY RELATIONS PLAN**  
**FOR**  
**REMOVAL ACTION NO. 5**  
**K-65 DECANT SUMP TANK**

**Prepared by:**  
**U.S. Department of Energy**

**August 1991**

**000001**

## I. Introduction

On July 18, 1986, a Federal Facility Compliance Agreement (FFCA) was jointly signed by the DOE and the U.S. Environmental Protection Agency (U.S. EPA) pertaining to environmental impacts associated with DOE's Feed Materials Production Center (FMPC) near Fernald, Ohio. The FFCA is intended to ensure that environmental impacts associated with past and present activities at the FMPC are thoroughly and adequately investigated so that appropriate response actions can be formulated, assessed, and implemented.

This addendum to the Community Relations Plan (CRP) for the Remedial Investigation/Feasibility Study (RI/FS) and Removal Action at the U.S. Department of Energy (DOE) at the Feed Materials Production Center (FMPC) has been prepared to guide the Community Relations activities of the DOE to support the development and implementation of the K-65 Decant Sump Tank Removal Action at the FMPC. The scope of this removal action can be defined as the removal and disposition of the liquid in the K-65 decant sump tank.

The removal action is being conducted pursuant to the June 1990 CERCLA Consent Agreement between DOE and the U.S. EPA. Through U.S. EPA correspondence concerning the Consent Agreement this removal action was added to the Consent Agreement as Removal Number 5: K-65 Decant Sump Tank Removal Action. This removal action is designed to comply with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, known as Superfund, the Superfund Amendments and Reauthorization Act (SARA) of 1986, and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) of 1990 (40 CFR 300.415 (m)). The Consent Agreement, relevant laws such as CERCLA and SARA and the NCP describe the process to be followed during a removal action.

This removal action includes the following activities:

- Removing the liquid from the K-65 decant sump tank;
- Sampling the liquid prior to storing the liquid. The liquid will be stored in a hazardous waste management controlled area until the treatment option for this removal action is determined;
- analyzing the liquid; and
- Treatment of the liquid based on the analytical results.

Community Relations activities relating to the K-65 decant sump tank, and Silos 1 and 2 (the K-65 Silos) at the FMPC are designed to achieve two overall objectives. These are:

- To ensure that interested parties are provided with information necessary to understand key issues and decisions relating to the K-65 Silos.
- To provide opportunities for the community to review the documents and proposed actions that support DOE's implementation of the recommended removal action.

This addendum to the CRP discusses the relationship of the K-65 Decant Sump Tank Removal Action to the RI/FS, a discussion of contamination associated with the K-65 decant sump tank,

and highlights of the Community Relations activities to support the K-65 Decant Sump Tank Removal Action.

## **II. Background of K-65 Decant Sump Tank Removal Action**

In response to the FFCA, and consistent with the CERCLA Consent Agreement signed by DOE and U.S. EPA in June 1990, an RI/FS is in progress pursuant to CERCLA, as amended by SARA. The technical strategy adopted for the RI/FS is to issue distinct RI/FS reports for each of the five identified operable units at the FMPC. Operable Unit 4 at the FMPC includes facilities used for the storage or disposal of radiological wastes from FMPC operations. These facilities include the K-65 decant sump tank, which contains material previously collected from the K-65 residues and water currently collected from the underdrain system for Silos 1 and 2.

The K-65 Silos are located on the west side of the FMPC and were constructed in 1951 and 1952. The silos are used for storage of radium-bearing wastes (K-65 material), a by-product of uranium ore processing. During the years between 1952 and 1958 when the K-65 material was transferred as a slurry into the K-65 Silos, the decant system of the K-65 Silos collected the liquid portion of the material and was stored in the 9,000 gallon K-65 decant sump tank.

The K-65 decant sump tank is located to the west between the K-65 Silos and approximately 35 feet below the surface of the berm surrounding the K-65 Silos. The K-65 Silos decant system piping, designed to collect the liquid portion of the slurry material, has since been taken apart. The K-65 decant sump tank, currently, collects water from the K-65 Silos underdrain system. Although there is no data to indicate any of the components of the decant sump tank drainage and collection system have leaked into the surrounding soil, the decant liquid in the sump tank, although maintaining a static level, has the potential for leaking into the surrounding soil. This liquid is a potential threat to the environment.

The following projects have been completed prior to initiating activities to implement a removal action:

- Through 1980, the K-65 decant sump tank was routinely pumped to remove the liquid collected from the underdrain system and treated through the existing FMPC waste water treatment facilities.
- Monthly sampling of the liquid has occurred since August 1989. Analysis of the samples indicates the presence of uranium isotopes, total uranium, radium-226 and thorium-230.

Removal actions, as described in the NCP of March 1990, are primarily intended to abate, minimize, stabilize, mitigate, or eliminate a release or a threat of release prior to a final action if there is a threat to public health or welfare or the environment. A second reason for implementing a removal action is to mitigate contaminant migration pending final action if site conditions permit a straight forward mitigative action and if significant migration would occur in the interim if no action is taken. The K-65 Decant Sump Tank Removal Action will abate, stabilize, and eliminate the threat of a release to the environment prior to the final remedial action.

A removal action for the K-65 Decant Sump Tank has been deemed appropriate, based on the above criteria. The K-65 Decant Sump Tank Removal Action is a time-critical removal action

since less than six months' time is available for planning. The K-65 Decant Sump Tank Removal Action Work Plan outlines the methodology to be used in the implementation of the Removal Action. The K-65 Decant Sump Tank Removal Action Work Plan will be used by the DOE as the basis for implementing the Removal Action.

### III. Background Information on Contamination Related to This Removal Action

In monthly water sampling of the K-65 Decant Sump Tank, elevated levels of uranium have been encountered and above-background levels of radium have also been found in the water. Although there is no data to indicate any of the components of the decant sump tank drainage and collection system have leaked into the surrounding soil, the decant liquid in the sump tank, although maintaining a static level, has the potential for leaking into the surrounding soil. This liquid is a potential threat to the environment. There is also concern for the potential of puncturing the tank during the K-65 Silos embankment and subsoils sampling.

As documented in Section 3.4 of the RI/FS Community Relations Plan, the K-65 Silos and related systems have appeared to represent a focal point for community concern. During the Community Assessment conducted in 1989, persons expressed fear about radioactive contamination either leaking out over a period of time or spilling into the local environment. The K-65 decant sump tank, as a part of Operable Unit 4, is one of the integral parts of CERCLA/SARA cleanup activity centering on the silos.

The K-65 Decant Sump Tank Removal Action provides a partial solution to the problem of potential leakage of K-65 silo material (in this case, the material is the water collected from the K-65 Silos underdrain system); in that respect, this removal action addresses one of the public's fears about potential leakage of material from this area.

### IV. Timetable for K-65 Decant Sump Tank Removal Action Community Relations Activities

The following timetable provides a schedule for community relations activities that are designed to inform the community about the K-65 Decant Sump Tank Removal Action. Each of these activities are described in detailed Section 4.0 of the RI/FS Community Relations Plan. In addition, other activities will be undertaken to meet community information needs. For example, a Community Roundtable meeting focusing on this removal could be held if sufficient community interest exists.

Since the Administrative Record file for this removal action has been opened, the K-65 Decant Sump Tank Removal Action has been discussed during two community meetings and in two issues of the FMPC publication that communicates cleanup news to the community. No questions surrounding this removal action were asked at either community meeting.

	<u>Date(s)</u>
1. Establish Administrative Record File at all AR file locations for the records of this removal action	10/30/90
2. File of Notice of Availability (NOA) of Administrative Record File in at least one major local newspaper	10/30/90

00005

3. Provide description of removal action in FMPC Cleanup Update 11/90
4. Provided status of removal actions in FMPC Cleanup Report (publication title changed to Fernald Site Cleanup Report in 6/91) 3/91, 7/91
5. Provide description of removal action in the FMPC Update 5/91
6. Include removal action discussions in FMPC Community Meeting agenda 3/91, 7/91

000005